

## Cal/Ecotox

Exposure Factors for Killdeer (*Charadrius vociferus*)\*

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Endpoint Type	Endpoint Value	Error	Range	Units	Sex	Life Stage	Location	Note	Reference
Body Weight - Mean	71.1			g	NR	Adult	Lab	a	1
Dietary Composition	ad. Coleoptera (16%), larval Coleoptera (10%), other larval Diptera (58%), larval Lepidoptera (11%), miscellaneous (5%)			NR	NR	Adult	TX	b	2
Dietary Composition	Acrididae (25.6%), Carabidae (26.2%), Tenebrionidae (8.5%), Curculionidae (7.1%), Scarabaeidae (6.8%), Hydrophilidae (1.3%), Chrysomelidae (1.1%), coleoptera larvae (9.7%), Syrphidae (3.3%), Sarcophagidae (1.9%), Muscidae (0.2%), lepidoptera larvae (0.5%), Formicidae (2.4%), Trichoptera (0.7%), Gastropoda (0.4%), Plant material (0.2%)			B		Both Adult and Juv.	ND	c	3
Dietary Composition	Physidae (0.9%), Odonata larvae (1.3%), Corixidae adult (1.3%), Coleoptera adult (25.5%), Coleoptera larvae (21.2%), Coleoptera adult pieces (17.0%), Diptera larvae (18.3%), Hymenoptera adult (6.1%), Unidentified (2.6%), plant fibers (1.3%), grit (4.5%)			NR		Both Adult and Juv.	MO	d	4
Longevity	10-11			yr-mo	NR	Adult	USA	e	5
Metabolic Rate	118.6	9.2 SE		kJ/d	F	Adult	MI	f	6
Metabolic Rate	92.6	8.1 SE		kJ/d	M	Adult	MI	g	6
Population Density	1(+/-2) to 5 (+/-6)			nests/100 ha	B	Adult	IA	h	7
Population Density	14.3			pairs/100 ha	B	Adult	MN	i	8
Population Density	31.3			pairs/100 ha	B	Adult	MN	j	8
Population Density	30.2			pairs/100 ha	B	Adult	MN	k	8
Population Density	33.3			pairs/100 ha	B	Adult	MN	l	8
Population Density	3.26 (24)			pairs/square mile	B	Adult	ND	m	9
Population Density	7.6 (fall), 15.4 (winter), 2.2 (spring)			birds/ha	NR	NR	Marin; CA	n	10
Population Density	2.2 (fall), 1.8 (winter), 1.3 (spring)			birds/ha	NR	NR	Marin; CA	o	10

## Notes

a body weight of an individual bird; N=1 bird

b aggregate percentage of food items in diet, based on stomach content analysis; N=7 birds; September; Texas High Plains

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- c occurrence of dietary items as percent of total gut contents; N=72 birds; June-July; McHenry and Billings Counties  
d volumetric aggregate percent of esophageal contents; N=15 birds; Condition=migrating; July-November; Mingo National Wildlife Refuge  
e from USFWS Bird Banding Laboratory data; N=86 band recoveries  
f mean daily energy expenditure during reproduction (during late incubation); N=14; April-August; Houghton Lake (lat. 44deg02', long. 08deg45')  
g mean daily energy expenditure during reproduction (during late incubation); N=14; April-August; Houghton Lake (lat. 44deg02', long. 08deg45')  
h mean nest densities in untilled corn or soybean fields; N=8-9 fields; spring; Adair County  
i estimated breeding density in planted field habitat (14 ha); N=NR; April-August; St. Paul Campus, Univ. of MN  
j estimated breeding density in asphalt area habitat (32 ha); N=NR; April-August; St. Paul Campus, Univ. of MN  
k estimated breeding density in bare cultivated field habitat (43 ha); N=NR; April-August; St. Paul Campus, Univ. of MN  
l estimated breeding density in open field habitat (24 ha); N=NR; April-August; St. Paul Campus, Univ. of MN  
m mean density of breeding birds (maximum density in parentheses); N=130 sample units (160 acres/unit); April-July  
n mean population density; N=5 seasons censused; fall, winter, spring; Bolinas Lagoon, Point Reyes National Seashore  
o mean population density; N=10 seasons censused; fall, winter, spring; Limantour Estero; Lower density at Limantour vs. Bolinas was due to greater availability of pasture habitat at Bolinas.

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